

**Amendments to the Claims**

This listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended): An automated imaging system comprising:  
an illumination source;  
a phosphorescent imaging target affixed to an object used in normal operation; and  
an optical imaging sensor for receiving luminance information emitted from said phosphorescent imaging target
2. (Original): The automated imaging system of claim 1 further comprising:  
a processor for analyzing said luminance information.
3. (Original): The automated imaging system of claim 1 wherein said illumination source moves in relation to said phosphorescent imaging target.
4. (Original): The automated imaging system of claim 1 wherein said phosphorescent imaging target is movable in relation to said illumination source.
5. (Canceled)
6. (Currently Amended): The automated imaging system of claim ~~5~~1 wherein said received luminance information determines a position of said object.
7. (Currently Amended): The automated imaging system of claim ~~5~~1 wherein said received luminance information determines an alignment of said object with another object.
8. (Currently Amended): The automated imaging system of claim ~~5~~1 wherein said received luminance information determines a presence of said object.

9. (Currently Amended): The method of automatically imaging an object comprising the steps of:

radiating photonic illumination onto said object, wherein said object is used in normal operation;

scanning said object;

re-radiating a portion of said radiated photonic illumination from a phosphorescent target on said object; and

receiving said re-radiated photonic illumination.

10. (Original): The method of claim 9 wherein said scanning step comprises the step of:

sweeping said photonic illumination across said object.

11. (Original): The method of claim 9 wherein said scanning step comprises the step of:

moving said object underneath said radiated photonic illumination.

12. (Original): The method of claim 9 wherein said receiving step comprises the steps of:

optically sensing said re-radiated photonic illumination.

13. (Original): The method of claim 9 further comprising the step of:  
determining a positional orientation responsive to said received re-radiated photonic illumination.

14. (Original): The method of claim 13 further comprising the step of:  
aligning said object with another object responsive to said determined positional orientation.

15. (Currently Amended): The method of claim 9 further comprising the step of:  
incrementing a counter for detecting a number of said objects responsive to said received re-radiated photonic illumination.

16. (Currently Amended): An imaging system for optoelectrically detecting a presence of an object, said imaging system comprising:

means for illuminating a region of space using a small-intensity illumination source;

means for providing a phosphorescent indicium on said object; and

means for detecting light energy re-radiated from said phosphorescent mark.

17. (Original): The imaging system of claim 16 further comprising:

means for processing presence information responsive to said detected light energy.

18. (Original): The imaging system of claim 17 further comprising:

means for determining a positional orientation responsive to said processed presence information.

19. (Original): The imaging system of claim 18 further comprising:

means for aligning said object with another object responsive to said determined positional orientation.